

IN THE CLAIMS:

Please enter the following claims as amended below:

Claims 1-16 were previously cancelled.

17. (amended) A method for subjecting a fluent food product to heat treatment using a pressure vessel of a type having inlet means adjacent one end of the vessel for a heating medium and a partition wall having an interior defining a treatment ~~chamber~~ zone having a fluent food product distribution device attached to an inlet for the food product adjacent the one end of the vessel, the treatment ~~chamber~~ zone having an open end located in spaced relation to the inlet means and a space provided between the interior wall of the vessel and the exterior wall of the partition wall, comprising the steps of: a) introducing the heating medium into the vessel at a point outside the partition wall, b) venting at least a portion of the heating medium from one end of the vessel through the treatment ~~chamber~~ zone so as to establish a flow direction for the heating medium in the treatment ~~chamber~~ zone from the open end toward the one end of the vessel, c) introducing the fluent food product from the distribution device in the form of a plurality of substantially discrete flat sprays directed at the interior wall of the ~~treatment chamber~~ partition wall with a pressure sufficient to cause the sprays to impact against the interior wall of the ~~treatment chamber~~ partition wall while still turbulent.

18. (original) The method as claimed in claim 17 including the step of directing the sprays at an acute angle to the interior wall of the treatment chamber.

19. (amended) The method as claimed in claim 18 wherein said acute angle is in the range of 45 degrees and 60 degrees.

20. (original) The method as claimed in claim 17 including the step of providing spaces between the sprays to allow the heating medium to pass through the spaces so provided.

21. (amended) The method as claimed in claim 17 including the step of venting the heating medium and any non-condensable gases from the one end of the vessel and treatment ~~chamber~~ zone.

22. (amended) The method as claimed in claim 17 ~~including the step of using steam as the heating medium~~ wherein the heating medium is steam.

23. (amended) The method as claimed in claim 17 ~~including the step of using milk as the fluent food product~~ wherein the fluent food product is milk.

24. (amended) A method of producing a powdered milk product from fresh milk comprising the steps of feeding the fresh milk to an evaporator having one or more stages and either before or after at least one evaporator stage, subjecting the milk to heat treatment using a pressure vessel of a type having inlet means adjacent one end of the vessel for a heating medium and a partition wall having an interior defining a treatment ~~chamber~~ zone having a fluent food product a fresh milk distribution device attached to an inlet for ~~the food product~~ the fresh milk adjacent the one end of the vessel, the treatment ~~chamber~~ zone having an open end located in spaced relation to the inlet means and a space provided between the interior wall of the vessel and the exterior wall of the partition wall, and introducing the heating medium into the vessel at a point outside the partition wall, venting at least a portion of the heating medium from one end of the vessel through the treatment ~~chamber~~ zone so as to establish a flow direction for the heating medium in the treatment ~~chamber~~ zone from the open end toward the one end of the vessel, introducing the fresh milk from the distribution device in the form of a plurality of substantially discrete flat sprays directed at the interior wall of the ~~treatment chamber~~ partition wall with a pressure sufficient to cause

the sprays to impact against the interior wall of the treatment chamber partition wall while still turbulent, removing the milk product from the vessel and passing the product to a dryer to produce a powdered milk product.

25. The method as claimed in claim 24 including the step of maintaining the milk in holding tubes between 2 seconds and 30 seconds.

26. The method as claimed in claim 25 wherein the step of maintaining the milk in holding tubes is for approximately 5 seconds.

27. The method as claimed in claim 24 including the step of using a plurality of evaporator stages and selecting a site among the stages, including before a first one and after the last one of the stages and positioning the vessel to receive milk product at that site and after heat treatment, passing the milk product to a subsequent stage.

Claims 28 -31 are cancelled.